



1600

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TECH CENTER 1600/2300

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/368,670C

DATE: 01/23/2003 f.b

TIME: 08:29:28

Input Set : A:\Corrected sequence listing#2.txt

Output Set: N:\CRF4\01232003\I368670C.raw

4 <110> APPLICANT: Boehringer Ingelheim (Canada) Ltd.
 6 <120> TITLE OF INVENTION: Hepatitis C Inhibitor Peptides
 9 <130> FILE REFERENCE: 13/063-2-C2
 11 <140> CURRENT APPLICATION NUMBER: 09/368,670C
 12 <141> CURRENT FILING DATE: 1999-08-05
 14 <150> PRIOR APPLICATION NUMBER: 60,095,945
 15 <151> PRIOR FILING DATE: 1998-08-10
 17 <152> PRIOR APPLICATION NUMBER: 60,055,186
 18 <153> PRIOR FILING DATE: 1997-08-11
 20 <154> PRIOR APPLICATION NUMBER: 09/131,758
 21 <155> PRIOR FILING DATE: 1997-08-11

22 <160> NUMBER OF SEQ ID NOS: 3
 23 <170> SOFTWARE: FastSeq for Windows Version 4.0

27 <210> SEQ ID NO: 1
 28 <211> LENGTH: 6
 29 <212> TYPE: PRT
 30 <213> ORGANISM: Hepatitis C
 32 <220> FEATURE:
 33 <221> NAME/KEY: VARIANT
 34 <222> LOCATION: 1
 35 <223> OTHER INFORMATION: Asp is capped with Ac
 37 <400> SEQUENCE: 1

38 Asp Asp Ile Val Pro Cys

39 1 5

42 <210> SEQ ID NO: 2

43 <211> LENGTH: 12

44 <212> TYPE: PRT

45 <213> ORGANISM: Hepatitis C

47 <400> SEQUENCE: 2

48 Asp Asp Ile Val Pro Cys Ser Met Ser Tyr Thr Trp

49 1 12

52 <210> SEQ ID NO: 3

53 <211> LENGTH: 12

54 <212> TYPE: PRT

55 <213> ORGANISM: Hepatitis C

57 <220> FEATURE:

58 <221> NAME/KEY: VARIANT

59 <222> LOCATION: 1

60 <223> OTHER INFORMATION: Asp is capped with biotin

62 <221> NAME/KEY: VARIANT

63 <222> LOCATION: 1

64 <223> OTHER INFORMATION: Tyr is biotinylated

W--> 66 <400> 3

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```

67 Asp Asp Ile Val Pro Cys Ser Met Ser Tyr Thr Trp
68 1 5 10
71 <210> SEQ ID NO: 4
72 <211> LENGTH: 6
73 <212> TYPE: PRT
74 <213> ORGANISM: Hepatitis C
75 <220> FEATURE:
76 <221> NAME/KEY: VARIANT
77 <222> LOCATION: 4
78 <223> OTHER INFORMATION: Tyr is iodinated
81 <400> SEQUENCE: 4
82 Ser Met Ser Tyr Thr Trp
83 1 5
84 <210> SEQ ID NO: 5
85 <211> LENGTH: 17
86 <212> TYPE: PRT
87 <213> ORGANISM: Hepatitis C
88 <400> SEQUENCE: 5
89 H2111 Gly Ser Val Val Ile Val Gly Arg Ile Ile Leu Ser Gly Arg
90 1 17
91 H211
92 <210> SEQ ID NO: 6
93 <211> LENGTH: 11
94 <212> TYPE: PRT
95 <213> ORGANISM: Hepatitis C
96 <220> FEATURE:
97 <221> NAME/KEY: VARIANT
98 <222> LOCATION: 1
99 <223> OTHER INFORMATION: Asp is derivatized with anthranilyl
100 <221> NAME/KEY: VARIANT
101 <222> LOCATION: 6
102 <223> OTHER INFORMATION: Xaa Abu
W--> 112 <221> VARIANT
113 <222> LOCATION: (6)...(7)
114 <223> OTHER INFORMATION: Abu-A between 6 and 7 is C(O)-O
W--> 116 <221> VARIANT
117 <222> LOCATION: 9
118 <223> OTHER INFORMATION: Tyr is derivatized with 4-iodo
W--> 120 <400> 6
W--> 121 Asp Asp Ile Val Pro Xaa Ala Met Tyr Thr Trp
122 1 11
123 H2111
124 <210> SEQ ID NO: 7
125 <211> LENGTH: 4
126 <212> TYPE: PRT
127 <213> ORGANISM: Hepatitis C
128 <220> FEATURE:
129 <221> NAME/KEY: VARIANT
130 <222> LOCATION: 1
131 <223> OTHER INFORMATION: Ala is succinylated

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```

135 <C21> NAME/KEY: VARIANT
136 <C22> LOCATION: 4
137 <C23> OTHER INFORMATION: Phe is derivatized with para-nitro-aniline
W--> 139 <400> 7
140 Ala Ala Pro Phe
141 1
144 <C10> SEQ ID NO: 8
145 <C11> LENGTH: 6
146 <C12> TYPE: PRT
147 <C13> ORGANISM: Hepatitis C
148 <C20> FEATURE:
149 <C21> NAME/KEY: VARIANT
151 <C22> LOCATION: 1
152 <C23> OTHER INFORMATION: Asp is acetylated
154 <400> SEQUENCE: 8
155 Asp Asp Ile Val Pro Cys
156 1 5
159 <C10> SEQ ID NO: 9
160 <C11> LENGTH: 6
161 <C12> TYPE: PRT
162 <C13> ORGANISM: Hepatitis C
163 <C20> FEATURE:
164 <C21> NAME/KEY: VARIANT
166 <C22> LOCATION: 1
167 <C23> OTHER INFORMATION: Glu is acetylated
169 <400> SEQUENCE: 9
170 Glu Asp Ile Val Pro Cys
171 1 5
174 <C10> SEQ ID NO: 10
175 <C11> LENGTH: 5
176 <C12> TYPE: PRT
177 <C13> ORGANISM: Hepatitis C
178 <C20> FEATURE:
179 <C21> NAME/KEY: VARIANT
181 <C22> LOCATION:
182 <C23> OTHER INFORMATION: Asp is capped with DAP
184 <400> SEQUENCE: 10
185 Asp Ile Val Pro Cys
186 1 5
189 <C10> SEQ ID NO: 11
190 <C11> LENGTH: 6
191 <C12> TYPE: PRT
192 <C13> ORGANISM: Hepatitis C
193 <C20> FEATURE:
194 <C21> NAME/KEY: VARIANT
196 <C22> LOCATION: 1
197 <C23> OTHER INFORMATION: Asp is acetylated
199 <400> SEQUENCE: 11
200 Asp Glu Ile Val Pro Cys

```

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```

201 1 5
204 <210> SEQ ID NO: 12
205 <211> LENGTH: 6
206 <212> TYPE: PRT
207 <213> ORGANISM: Hepatitis C
208 <214> FEATURE:
209 <215> NAME/KEY: VARIANT
210 <216> LOCATION: 1
211 <217> OTHER INFORMATION: Asp is acetylated
212 <400> SEQUENCE: 12
213 Asp Val Ile Val Pro Cys
214 1 5
217 <210> SEQ ID NO: 13
218 <211> LENGTH: 6
219 <212> TYPE: PRT
220 <213> ORGANISM: Hepatitis C
221 <214> FEATURE:
222 <215> NAME/KEY: VARIANT
223 <216> LOCATION: 1
224 <217> OTHER INFORMATION: Xaa=Tbq
225 <218> NAME/KEY: VARIANT
226 <219> LOCATION:
227 <220> OTHER INFORMATION: Asp is acetylated

```

W--> 233 <400> 13

W--> 234 Asp Xaa Ile Val Pro Cys

```

235 1 5
238 <210> SEQ ID NO: 14
239 <211> LENGTH: 6
240 <212> TYPE: PRT
241 <213> ORGANISM: Hepatitis C
242 <214> FEATURE:
243 <215> NAME/KEY: VARIANT
244 <216> LOCATION: 1
245 <217> OTHER INFORMATION: Asp is acetylated
246 <400> SEQUENCE: 14
247 Asp Asp Val Val Pro Cys
248 1 5
251 <210> SEQ ID NO: 15
252 <211> LENGTH: 6
253 <212> TYPE: PRT
254 <213> ORGANISM: Hepatitis C
255 <214> FEATURE:
256 <215> NAME/KEY: VARIANT
257 <216> LOCATION:
258 <217> OTHER INFORMATION: Xaa=Chg
259 <218> NAME/KEY: VARIANT
260 <219> LOCATION: 1
261 <220> OTHER INFORMATION: Asp is acetylated

```

W--> 267 <400> 15

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W--> 268 Asp Asp Xaa Val Pro Cys

269 1 5
 272 <10> SEQ ID NO: 16
 273 <11> LENGTH: 6
 274 <12> TYPE: PRT
 275 <13> ORGANISM: Hepatitis C
 277 <20> FEATURE:
 278 <21> NAME/KEY: VARIANT
 279 <22> LOCATION: 3
 280 <23> OTHER INFORMATION: Xaa=Tbg
 282 <21> NAME/KEY: VARIANT
 283 <22> LOCATION: 1
 284 <23> OTHER INFORMATION: Asp is acetylated

W--> 286 <400> 16

W--> 287 Asp Asp Xaa Val Pro Cys

288 1 5
 291 <10> SEQ ID NO: 17
 292 <11> LENGTH: 6
 293 <12> TYPE: PRT
 294 <13> ORGANISM: Hepatitis C
 296 <20> FEATURE:
 297 <21> NAME/KEY: VARIANT
 298 <22> LOCATION: 1
 299 <23> OTHER INFORMATION: Asp is acetylated
 301 <400> SEQUENCE: 17
 302 Asp Asp Val Val Pro Cys
 303 1 5
 306 <10> SEQ ID NO: 18
 307 <11> LENGTH: 6
 308 <12> TYPE: PRT
 309 <13> ORGANISM: Hepatitis C
 311 <20> FEATURE:
 312 <21> NAME/KEY: VARIANT
 313 <22> LOCATION: 1
 314 <23> OTHER INFORMATION: Asp is acetylated
 316 <400> SEQUENCE: 18
 317 Asp Asp Ile Ile Pro Cys
 318 1 5
 321 <10> SEQ ID NO: 19
 322 <11> LENGTH: 6
 323 <12> TYPE: PRT
 324 <13> ORGANISM: Hepatitis C
 326 <20> FEATURE:
 327 <21> NAME/KEY: VARIANT
 328 <22> LOCATION: 4
 329 <23> OTHER INFORMATION: Xaa=Gba
 331 <21> NAME/KEY: VARIANT
 332 <22> LOCATION: 1
 333 <23> OTHER INFORMATION: Asp is acetylated

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/368,670CDATE: 01/23/2003
TIME: 08:29:29Input Set : A:\Corrected sequence listing#2.txt
Output Set: N:\CRF4\01232003\I368670C.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:6; Xaa Pos. 6
Seq#:13; Xaa Pos. 2
Seq#:15; Xaa Pos. 3
Seq#:16; Xaa Pos. 1
Seq#:19; Xaa Pos. 4
Seq#:20; Xaa Pos. 5
Seq#:26; Xaa Pos. 5
Seq#:27; Xaa Pos. 6
Seq#:28; Xaa Pos. 6
Seq#:29; Xaa Pos. 6
Seq#:30; Xaa Pos. 6
Seq#:31; Xaa Pos. 6
Seq#:32; Xaa Pos. 5,6
Seq#:33; Xaa Pos. 5,6
Seq#:34; Xaa Pos. 5
Seq#:35; Xaa Pos. 5
Seq#:36; Xaa Pos. 5,5,6
Seq#:37; Xaa Pos. 5,6
Seq#:38; Xaa Pos. 5,6
Seq#:39; Xaa Pos. 5,6
Seq#:40; Xaa Pos. 5,6
Seq#:41; Xaa Pos. 5,6
Seq#:42; Xaa Pos. 5,6
Seq#:43; Xaa Pos. 5,6
Seq#:44; Xaa Pos. 5,6
Seq#:45; Xaa Pos. 5,6
Seq#:46; Xaa Pos. 5,6
Seq#:47; Xaa Pos. 5,6
Seq#:48; Xaa Pos. 5,6
Seq#:49; Xaa Pos. 5,6
Seq#:50; Xaa Pos. 6
Seq#:51; Xaa Pos. 5,6
Seq#:52; Xaa Pos. 5,6
Seq#:53; Xaa Pos. 5,6

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```

L:166 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#3
L:113 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#6
L:116 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#6
L:120 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#6
L:141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#6 after pos.:0
L:189 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#7
L:234 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#13
L:234 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#13 after pos.:0
L:267 M:341 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#13
L:268 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#13 after pos.:0
L:286 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#16
L:287 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#16 after pos.:0
L:335 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#19
L:336 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#19 after pos.:0
L:354 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#20
L:355 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#20 after pos.:0
L:411 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#26
L:412 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#26 after pos.:0
L:431 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#27
L:432 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#27 after pos.:0
L:478 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#28
L:479 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#28 after pos.:0
L:519 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#29
L:520 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#29 after pos.:0
L:534 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#30
L:535 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#30 after pos.:0
L:541 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#31
L:542 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#31 after pos.:0
L:550 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#32
L:551 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#32
L:551 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#32 after pos.:0
L:553 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#33
L:539 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#33
L:539 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#33 after pos.:0
L:601 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#34
L:602 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#34 after pos.:0
L:621 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#35
L:622 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#35 after pos.:0
L:646 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#36
L:647 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#36
L:648 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#36 after pos.:0
L:663 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#37
L:664 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#37
L:664 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#37 after pos.:0
L:646 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#38
L:700 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#38
L:701 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#38 after pos.:0

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L:719 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:39
L:723 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:39
L:724 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0
L:747 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:40
L:748 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:40
L:749 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0
L:765 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:41
L:766 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:41
L:770 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:0
L:788 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:42
L:792 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:42
L:793 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0
L:811 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:43
L:815 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:43
L:816 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0
L:834 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:44
L:835 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:44
L:836 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:0
L:857 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:45
L:858 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:45
L:860 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:0
L:881 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:46
L:884 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:46
L:885 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:0
L:903 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:47
L:907 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:47
L:918 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0
L:935 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:48
L:940 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:48
L:951 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0
L:949 M:358 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:49
L:954 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:0
L:973 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0
L:986 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:0
L:1019 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:0
L:1042 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:0